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ABSTRACT

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(54) Title: PROCESS FOR THE PREPARATION OF ANIONIC AQUEOUS POLYMER DISPERSIONS CONTAINING NO VOLATILE TERTIARY AMINE, OBTAINED DISPERSION AND COATING RESULTING FROM SAID DISPERSION

(57) Abstract: The invention relates to a process for the preparation of an aqueous dispersion of an anionic polyurethane in which initially a tertiary aminofunctional acrylic monomer is used as neutralizing agent for pendant carboxylic acid groups in dispersions of a polyurethane or a polyurethane/polyacrylate, whereafter the unsaturated monomers undergo in situ an addition polymerisation, optionally together with other unsaturated monomers. In the process the isocyanate terminated prepolymer may be reacted with 0-100 % of a stoichiometric amount of a hydroxy functional unsaturated monomer before the dispersion in water. The tertiary amine functional unsaturated monomer is present in a ratio to the anionic residues to be neutralized in the polyurethane prepolymer from 0.3 to 2 and preferably from 0.7 to 1.5. Furthermore the amount of carboxylic acid functions in the isocyanate functional polyurethane prepolymer is from 1 to 15 % and preferably from 2 to 10 %. The invention also relates to dispersions prepared by the present process and to a coating or film obtained from said dispersion.